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THE MEASUREMENT OF IMPROVEMENT IN ENGLISH COMPOSITION

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Teachers of English composition in high schools, demanding as they do a large share of the students' time, may fairly be called upon to give definite answers to these questions: Do students who write a weekly theme under the ordinary school conditions improve in ability to write? Is improvement characteristic of all or only a portion of such students? How much improvement may fairly be expected as a result of such practice? What are satisfactory limits of improvement for high-school students? What are the necessary conditions for satisfactory improvement? What hindering conditions may be avoided?

Answers to questions of this type have hitherto been drawn wholly from the personal experience of teachers of composition, and the favorite method for settling such questions has been the method of debate. Within a few years invention of composition scales has given us a more objective method by which these avowedly quantitative, as well as qualitative, questions may be investigated and given tangible answers. The study here reported represents an initial effort to study some of these problems by means of the Harvard-Newton scale¹ and to clarify certain problems for further investigation.

¹ *Harvard-Newton Bulletin*, No. II.

Briefly stated, the authors have attempted to measure the composition work of seventy-eight high-school students throughout a period of twelve weeks. These students made up the second-semester Freshman class in the University of Minnesota High School and the first-semester Freshman and first-semester Sophomore classes in the West High School of Minneapolis. In the discussion to follow, these classes are designated as II, I, and III respectively.

SELECTION OF SUBJECTS

In selecting the topics to be assigned for the twelve exercises, ten texts on English composition were examined. From these ten books fifty topics were chosen and submitted to three teachers of high-school English, two of whom were in charge of classes to be studied. Each teacher was asked to check twenty of the titles "which would form suitable theme topics for a Freshman class in English composition." They were asked to distribute the topics "among the three forms of discourse, narration, description, and exposition," and "to suggest additional topics."

Six topics were found upon which there was common agreement on the part of the three teachers; four others were selected upon which the two teachers in charge of classes concerned in the experiment agreed; and the remaining two topics were approved by two of the three teachers, one of whom was not concerned in the experiment. The list of topics for the experiments follows in the order assigned:

1. The Things I Most Admire about Minneapolis
2. A Morning of Troubles
3. A Description of a Snowstorm
4. My First Week at High School
5. The Pleasures of Skating (or Some Other Sport)
6. How I Earned Some Money
7. The Right Kind of a Chum
8. Description of an Attractive House
9. Observations of the Schoolroom Clock
10. Three Books I Should Like to Own and Why
11. An Autobiography of an Umbrella
12. Sitting for a Picture

EXPERIMENTAL PROCEDURE

The experiment was begun in all of these classes on the same day when all the students were asked to write a theme on "The Things I Most Admire about Minneapolis." This and all other exercises were given at the regular recitation period, which for all classes was forty-five minutes. The interval between the successive exercises was one week.

With a view to controlling the experiment as much as possible, the following directions were issued to the three teachers who set the exercises for their several classes:

1. The compositions are to be written on the prescribed topic during one class hour of each week covering a period of twelve weeks.
2. Announce the subject to the class and write it upon the board.
3. Give no individual aid and do not permit any consultation of dictionaries or reference books during the hour.
4. Collect the papers at the end of the period, regardless of whether or not they are completed.
5. Give the following directions to the class: "Write the best composition you can on the subject given. Plan and organize your theme carefully in order that it may be completed by the end of the period. Do not consult any dictionaries or reference books, and ask no questions."

No further information regarding the study or its purpose was given the students.

METHOD OF SCORING

The compositions were collected and, in all classes but one, were handed directly to Miss Brown, who scored them by the Harvard-Newton scale. In the one case the teacher graded the papers by the scale and then handed them, free from any marks or corrections, to Miss Brown, who then scored them. The papers, graded and corrected, were returned to the students, who subsequently made the indicated corrections.

In scoring the papers it was found advisable to use values intermediate between those given on the scale, as compositions were frequently discovered which seemed deserving of a score higher than a certain point on the scale, and yet not so high as the next point indicated on the scale. A value just half-way between the two points was given.

DEPENDABILITY OF SCORES

The value allotted to each paper in this discussion is the score given by Miss Brown. We have three measures of the reliability of her judgments. It will be recalled that the teacher of Class III graded all the compositions from her class. In Table I are given six weeks' marks for this class as assigned by this teacher (column A) and Miss Brown (column B). It shows that the two judges, although marking independently, gave very similar marks. The coefficient of correlation is never less than .83. At times it is much higher. From this we may conclude that whatever may be the absolute value of the experimenter's judgment, she was evaluating the themes in essentially the same terms as was the teacher of the class.

A similar confirmation of her judgment is given in Table II. In this table the marks given by the teachers of Classes I and II are shown alongside of those assigned by the experimenter. The correlations here are high, being .83 and .92 respectively.

Finally, the teacher of Class II was asked to rate the pupils of her class in terms of their ability to write, and to make different ratings for ability in "force and originality" and in "form and accuracy of expression." In Table III are given the correlations for three composition measures and the two ratings by this teacher. The first column shows correlations based on the compositions for April 23, the second column for the compositions of March 23, and the third column for the median score of each pupil for the entire twelve weeks.

All the checks used seem to justify us in regarding Miss Brown's scores as accurate to a high degree and as representing the same qualities in composition as are considered desirable by the teachers whose students were being measured.

RESULTS

Approximately a thousand compositions were written and scored in the course of the experiment. In Table IV are all the scores for Class I for the entire experiment. In Table V the weekly scores

TABLE I

SCORES GIVEN BY MISS BROWN (COLUMN B) AND BY THE TEACHER OF THE CLASS
(CLASS III) FOR EACH OF SIX WEEKS

PUPIL	WEEK											
	4		6		7		8		9		10	
	A	B	A	B	A	B	A	B	A	B	A	B
1.....	83.0	83.0	83.0	83.0	76.1	76.1	83.5	83.5	83.0	83.0	82.0	86.9
2.....	76.2	76.2	83.0	76.2	71.3	71.3	83.5	83.5	83.0	79.6	82.0	82.0
3.....	76.2	83.0	71.3	71.3	83.5	83.5	76.1	76.1	79.6	83.0	82.0	82.0
4.....	93.5	93.5	93.5	93.5	89.0	83.5	89.0	89.0	93.5	93.5	86.9	91.8
5.....	83.0	83.0	88.2	83.0	83.5	83.5	83.5	83.5	83.0	83.0	76.7	76.7
6.....	66.4	66.4	88.2	88.2	76.1	76.1	76.1	76.1	83.0	83.0	82.0	82.0
7.....	76.2	83.0	83.0	83.0	76.1	76.1	89.0	89.0	93.5	93.5	91.8	91.8
8.....	.....	.....	88.2	88.2	76.1	76.1	89.0	89.0	93.5	93.5	86.9	96.9
9.....	56.0	83.0	83.0	83.0	83.5	89.0	83.5	83.5	83.0	83.0	82.0	86.9
10.....	76.2	76.2	83.0	83.0	76.1	76.1	76.1	76.1	.....	.....	86.9	82.0
11.....	76.2	79.6	76.2	83.0	83.5	89.0	83.5	83.5	93.5	93.5	82.0	86.9
12.....	76.2	76.2	83.0	83.0	76.1	76.1	83.5	83.5	83.0	83.0	76.7	76.7
13.....	83.0	83.0	88.2	88.2	.....	.....	.....	.....	83.0	83.0	86.9	86.9
14.....	66.4	66.4	76.2	76.2	76.1	76.1	76.1	76.1	76.2	76.2	71.4	71.4
15.....	76.2	76.2	76.2	76.2	71.3	76.1	83.5	76.1	83.0	83.0	82.0	82.0
16.....	76.2	76.2	83.0	83.0	83.5	83.5	89.0	89.0	88.2	88.2	82.0	82.0
17.....	76.2	76.2	83.0	83.0	76.1	76.1	83.5	83.5	83.0	83.0	82.0	76.7
18.....	83.0	83.0	83.0	83.0	83.5	76.1	83.5	83.5	88.2	88.2	86.9	86.9
19.....	76.2	76.2	76.2	76.2	66.6	66.6	83.5	83.5	83.0	83.0	82.0	82.0
20.....	83.0	83.0	83.0	83.0	.....	.....	76.1	76.1	88.2	88.2	.....	.....
21.....	83.0	88.2	88.2	88.2	76.1	76.1	89.0	89.0	88.2	88.2	86.9	86.9
22.....	83.0	88.2	93.5	93.5	76.1	76.1	83.5	83.5	93.5	93.5	91.8	91.8
23.....	76.2	76.2	83.0	83.0	76.1	76.1	83.5	83.5	79.6	79.6	86.9	82.0
24.....	56.0	76.2	83.0	83.0	76.1	83.5	83.5	83.5	93.5	92.5	71.4	76.7
25.....	76.2	76.2	83.0	83.0	76.1	76.1	83.5	83.5	83.0	83.0	61.0	71.4
26.....	83.0	83.0	88.2	88.2	76.1	76.1	89.0	89.0	76.2	76.2	82.0	86.9
27.....	83.0	88.2	83.0	83.0	83.5	83.5	89.0	89.0	88.2	88.2	.....	.....
28.....	66.4	66.4	93.5	93.5	83.5	76.1	89.0	89.0	93.5	93.5	86.9	86.9
29.....	.....	.....	76.2	76.2	66.6	66.6	.....	.....	76.2	76.2	76.7	76.7
30.....	66.4	66.4	76.2	76.2	71.3	71.3	83.5	83.5	79.6	79.6	76.7	76.7
31.....	76.2	76.2	83.0	76.2	76.1	76.1	.....	.....	76.2	76.2	82.0	82.0
32.....	66.4	71.3	76.2	76.2	76.1	76.1	66.6	66.6	76.2	76.2	82.0	82.0
33.....	83.0	83.0	83.0	83.0	83.5	83.5	89.0	83.5	93.5	93.5	86.9	86.9
34.....	83.0	83.0	88.2	88.2	89.0	89.0	83.5	83.5	93.5	93.5	91.8	91.8
35.....	76.2	76.2	76.2	71.3	71.3	71.3	71.3	71.3	79.6	79.6	76.7	76.7
Correla- tion..	.83		.92		.86		.97		.98		.87	

for all the individuals of the three classes are funded into monthly scores. This table also shows the gain or loss in quality of work

TABLE II

SCORES GIVEN BY MISS BROWN (COLUMN B) AND BY THE
TEACHERS OF CLASSES I AND II (COLUMN A) FOR ONE WEEK

PUPIL	CLASS			
	I		II	
	A	B	A	B
1.....	61.0	61.0	52.6	61.0
2.....	61.0	71.4	52.6	61.0
3.....	71.4	71.4	52.6	61.0
4.....	71.4	76.7	55.0	71.4
5.....	71.4	76.7	62.0	71.4
6.....	71.4	71.4	62.0	71.4
7.....	71.4	71.4	71.4	76.2
8.....	71.4	71.4	71.4	76.7
9.....	71.4	76.7	71.4	71.4
10.....	71.4	86.9	71.4	82.0
11.....	71.4	76.7	71.4	82.0
12.....	71.4	82.0	71.4	71.4
13.....	71.4	76.7	71.4	76.7
14.....	71.4	76.7	71.4	82.0
15.....	71.4	82.0	82.0	86.9
16.....	76.7	76.7	82.0	86.9
17.....	82.0	86.9	82.0	76.7
18.....	82.0	82.0	83.0	83.0
19.....	82.0	91.8	86.9	91.8
20.....	82.0	82.0	86.9	86.9
21.....	82.0	86.9	88.2	88.2
22.....	82.0	91.8	91.8	91.8
23.....	82.0	82.0	91.8	88.2
24.....	86.9	86.9	.....	.....
25.....	86.9	86.9	.....	.....
26.....	91.8	91.8	.....	.....
27.....	.....	.....	.....	.....
28.....	.....	.....	.....	.....
29.....	.....	.....	.....	.....
Correlation...	.83		.92	

for each student. This gain is the difference between the scores for the first and the last months of the experiment. At the bottom

TABLE III

COEFFICIENTS OF CORRELATION BETWEEN TEACHER'S RATINGS AS TO ABILITY TO
WRITE AND HARVARD-NEWTON SCORES GIVEN BY EXPERIMENTER

	SCORES FOR		MEDIAN OF ALL SCORES
	April 23	March 23	
Rating as to ability in force and originality	75	85	93
Rating as to ability in form and accuracy	64	65	70

TABLE IV

SCORES OF ALL PUPILS IN CLASS I FOR EACH OF TWELVE WEEKS, ALSO CLASS
MEDIAN SCORE

Pupil	Week											
	1	2	3	4	5	6	7	8	9	10	11	12
1.....	91.8	88.2	94.6	88.2	82.0	93.5	89.0	89.0	93.5	91.8	88.2	83.5
2.....	76.7	76.2	83.5	83.0	82.0	83.0	83.5	76.1	88.2	86.9	88.2	83.5
3.....	76.7	76.2	79.8	88.2	91.8	83.0	83.5	83.5	88.2	86.9	93.5	89.0
4.....	76.7	79.6	83.5	76.2	76.7	88.2	76.1	76.1	88.2	82.0	83.0	89.0
5.....	82.0	83.0	76.1	88.2	76.7	76.2	83.5	76.1	83.0	86.9	83.0	83.5
6.....	82.0	79.6	71.3	83.0	82.0	83.0	76.1	83.5	83.0	86.9	83.0	83.5
7.....	82.0	76.2	83.5	83.0	76.7	83.0	76.1	76.1	71.3	82.0	79.6	83.5
8.....	82.0	83.0	76.1	83.0	76.7	83.0	83.5	76.1	83.0	82.0	83.0	76.1
9.....	82.0	79.6	76.1	83.0	86.9	88.2	83.5	83.5	83.0	86.9	83.0	83.5
10.....	61.0	66.4	66.6	66.4	61.0	76.2	66.6	71.3	79.6	82.0	83.0	83.5
11.....	61.0	76.2	76.1	83.0	86.9	83.0	83.5	83.5	83.0	86.9	79.6	83.5
12.....	71.4	83.0	89.0	76.2	82.0	83.0	83.5	71.3	88.2	82.0	83.0	83.5
13.....	86.9	88.2	83.5	88.2	91.8	93.5	83.5	83.5	93.5	86.9	93.5	89.0
14.....	82.0	83.0	83.5	83.0	76.7	83.0	76.1	89.0	88.2	82.0	88.2	79.6
15.....	61.0	76.2	71.3	66.4	71.4	76.2	76.1	76.1	83.0	76.7	83.0	83.5
16.....	86.9	93.5	94.6	88.2	82.0	88.2	83.5	83.5	93.5	91.8	88.2	89.0
17.....	76.7	76.2	94.6	83.0	91.8	83.0	83.5	83.5	83.0	82.0	88.2	89.0
18.....	56.8	76.2	79.8	66.4	71.4	83.0	76.1	76.1	83.0	82.0	79.6	83.5
19.....	82.0	79.6	89.0	88.2	86.9	88.2	76.1	83.5	83.0	86.9	88.2	93.5
20.....	61.0	71.3	76.1	76.2	71.4	83.0	76.1	71.3	79.6	82.0	79.6	83.5
21.....	82.0	83.0	66.6	83.0	71.4	76.2	66.6	76.1	83.0	82.0	83.0	89.0
22.....	82.0	83.0	76.1	83.0	86.9	83.0	83.5	76.1	83.0	82.0	83.0	89.0
23.....	76.7	79.6	83.5	88.2	86.9	93.5	89.0	89.0	93.5	91.8	93.5	94.6
24.....	82.0	88.2	89.0	83.0	76.7	83.0	76.1	83.5	93.5	82.0	88.2	83.5
25.....	76.7	83.0	83.5	83.0	71.4	83.0	76.1	83.5	83.0	86.9	83.0	83.5
26.....	82.0	76.2	76.1	71.3	76.7	83.0	83.5	83.5	88.2	82.0	88.2	89.0
Median	82.4	81.3	81.6	85.1	81.2	86.1	83.9	84.6	87.3	86.5	87.2	87.8

of this table are the median scores for each class for each month and the gain for the group as a whole.

TABLE V

AVERAGE MONTHLY SCORES OF ALL STUDENTS IN ALL CLASSES AND GAIN OF LAST MONTH'S SCORE OVER THAT OF FIRST MONTH

PUPIL	CLASS I				CLASS II				CLASS III			
	Month			Gain	Month			Gain	Month			Gain
	1	2	3		1	2	3		1	2	3	
1.....	90.7	88.3	89.2	-1.5	74.9	79.3	82.2	7.3	75.3	78.5	85.4	10.1
2.....	79.8	81.1	86.7	6.9	62.4	70.1	71.6	9.2	79.7	78.2	79.2	-0.5
3.....	80.2	85.4	89.4	9.2	70.2	73.5	76.3	6.1	81.3	75.5	84.1	2.8
4.....	79.0	79.2	85.5	6.5	63.8	65.9	70.8	7.0	93.3	89.4	93.3	0.0
5.....	82.3	78.1	84.1	1.8	79.8	88.7	83.3	3.5	81.1	81.7	80.7	-0.4
6.....	78.9	81.1	84.1	5.2	90.9	91.3	93.3	2.4	73.8	77.9	81.9	8.1
7.....	81.1	77.9	79.1	-2.0	56.3	63.5	77.6	21.3	82.8	83.7	90.5	7.7
8.....	81.0	79.8	81.0	0.0	68.4	74.6	80.7	12.3	91.4	83.8	89.4	-2.0
9.....	80.1	85.5	84.1	4.0	63.2	68.7	74.7	11.5	85.4	84.3	84.1	-1.3
10.....	65.1	68.7	82.0	16.9	75.8	60.2	77.0	1.2	67.3	76.6	82.1	14.8
11.....	74.0	84.2	83.2	9.2	80.2	84.7	82.9	2.7	77.8	81.7	86.1	8.3
12.....	79.9	89.9	84.1	4.2	85.1	86.8	88.0	2.9	76.3	80.8	80.6	4.3
13.....	86.7	88.0	90.7	4.0	83.3	85.6	91.7	8.4	79.3	85.1	83.5	4.2
14.....	82.8	81.2	84.5	1.7	90.9	89.4	93.5	2.6	71.3	76.2	75.8	4.5
15.....	68.7	74.9	81.5	12.8	77.1	82.3	84.7	7.6	70.0	74.9	81.9	11.9
16.....	90.8	84.3	90.6	-0.2	66.4	77.3	82.7	16.3	77.6	83.0	85.4	7.8
17.....	82.6	85.4	85.5	2.9	81.2	86.3	90.6	9.4	79.3	79.8	79.9	0.6
18.....	69.8	76.6	82.0	12.2	72.5	74.6	80.7	8.2	81.2	81.1	88.0	6.8
19.....	84.7	83.6	87.9	3.2	82.8	85.0	89.3	6.5	70.0	74.4	82.6	12.6
20.....	71.1	75.4	81.1	10.0	77.5	74.4	81.9	4.4	84.2	82.0	84.9	0.7
21.....	78.6	72.5	84.2	5.6	94.0	90.8	93.3	-0.7	86.7	85.0	83.6	-3.1
22.....	81.0	82.3	84.2	3.2	84.7	90.5	92.9	8.2	84.7	85.0	89.2	4.5
23.....	82.0	89.6	93.3	11.3	86.6	86.8	91.3	4.7	76.3	79.8	83.3	7.0
24.....	85.5	79.8	86.8	1.3	77.8	78.7	73.7	-4.1	84.0	77.7	86.8	2.8
25.....	81.5	78.5	84.1	2.6	.....	.....	.....	.....	73.7	79.8	79.7	6.0
26.....	76.4	81.6	86.8	10.4	.....	.....	.....	.....	79.7	82.5	80.5	0.8
27.....	.....	.....	.....	.....	.....	.....	.....	.....	80.9	85.1	88.4	-1.5
28.....	.....	.....	.....	.....	.....	.....	.....	.....	77.0	86.3	89.4	12.4
29.....	.....	.....	.....	.....	.....	.....	.....	.....	68.9	71.4	78.0	9.1
30.....	.....	.....	.....	.....	.....	.....	.....	.....	72.9	75.6	79.7	6.8
31.....	.....	.....	.....	.....	.....	.....	.....	.....	74.9	76.1	79.3	4.4
32.....	.....	.....	.....	.....	.....	.....	.....	.....	74.4	72.9	79.3	4.9
33.....	.....	.....	.....	.....	.....	.....	.....	.....	84.1	83.0	88.0	3.9
34.....	.....	.....	.....	.....	.....	.....	.....	.....	81.9	86.9	88.7	6.8
35.....	.....	.....	.....	.....	.....	.....	.....	.....	68.7	71.3	78.8	10.1
Median	80.1	81.1	84.3	4.2	77.6	80.5	82.8	5.2	79.3	80.8	83.5	4.2

The data represented in Tables IV and V show that in general the classes improved as a result of the twelve weeks' experience. Whether the improvement is attributable to the exercises of this investigation may be doubted. During this time the students of each class received daily instruction in English—literature and composition—while the set exercises which were measured occurred but once a week. The improvement may thus be due largely to the regular class work. The amount of improvement is the same, 4.2 Harvard-Newton scale points, for Classes I and III; and slightly more, 5.2 points, for Class II.

It is an interesting fact that Class I,¹ the one lowest in academic standing, made the best record in quality of work. The average for this class for the three months was 81.8 as against 81.2 for Class III, and 80.3 for Class II. Clearly the distinction of Freshman and Sophomore and first and second semester meant nothing definite so far as the work of these classes was concerned. In Fig. 1 the median weekly scores for the three classes are shown by curves. The full-drawn line shows the scores of Class I, the dashed line the scores of Class II, and the dotted line the scores for Class III. The almost identical position of the curves for the classes shows how nearly they were equal in attainment.

TYPES OF INDIVIDUALS

As usual, however, the median marks do not adequately represent the facts. It is necessary to study the individual cases. Five of these, selected from Classes II and III, are represented by the curves of Fig. 2. In this figure, curve 1 shows a pupil very poor in the beginning who makes regular and considerable improvement, gaining 21.3 points from the first to the third month. In the three classes there are but two other pupils who gained as much as fifteen points. There were sixteen in all who gained ten or more points.

Curve 4 represents a very good student, one of exceptional ability in composition, whose faithful practice for the three months netted a loss of 0.7 point from the first to the last month, and a drop of 3.2 points for the intermediate month. In each class there

¹ This, the college preparatory section, was regarded as a superior Freshman class. Tests with Trabue Scale L showed median scores as follows: Class I, 15; Class III, 15.8.

were similar cases, a total of eleven in all. Most of these pupils were of good class standing and showed relatively high initial scores in composition.

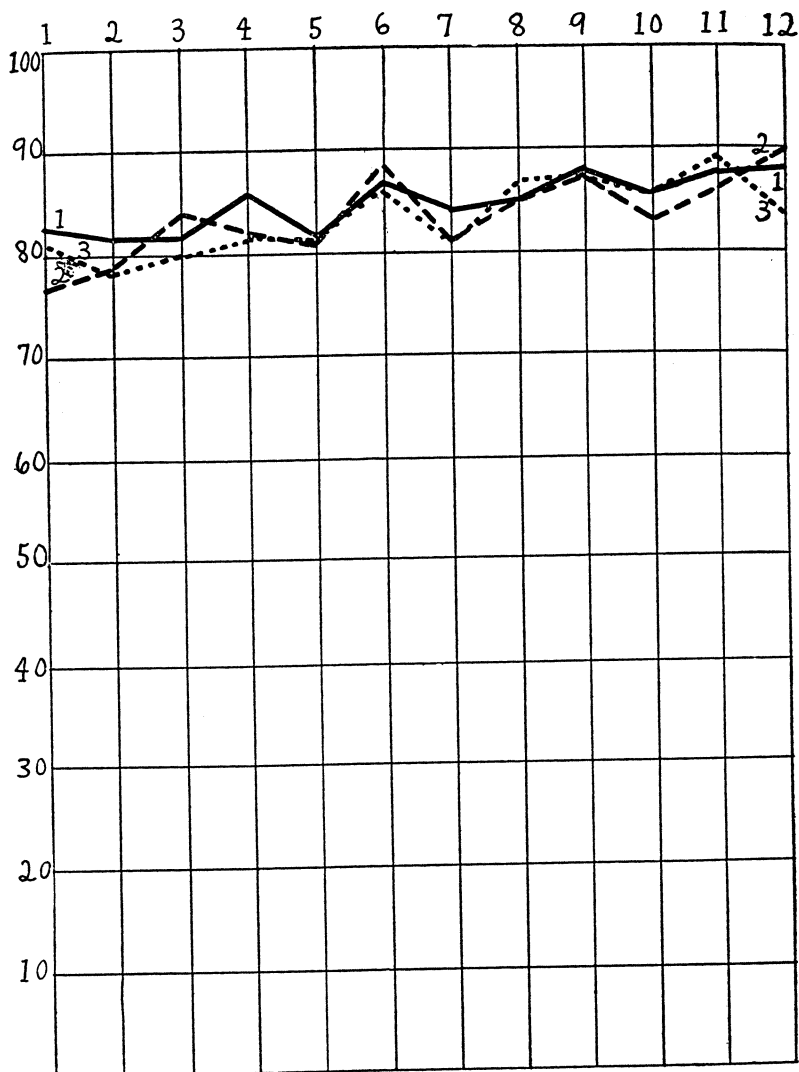


FIG. 1.—Learning curves for three high-school classes, median scores. Full drawn line=Class I, first-semester Freshmen; dotted line=Class II, second-semester Freshmen; dashed line=Class III, first-semester Sophomores. Figures on ordinate=units on Harvard-Newton scale; figures on abscissa=successive weeks of practice.

Curve 2 represents a boy, "one of the most original students of the group," whose improvement was "practically all on the

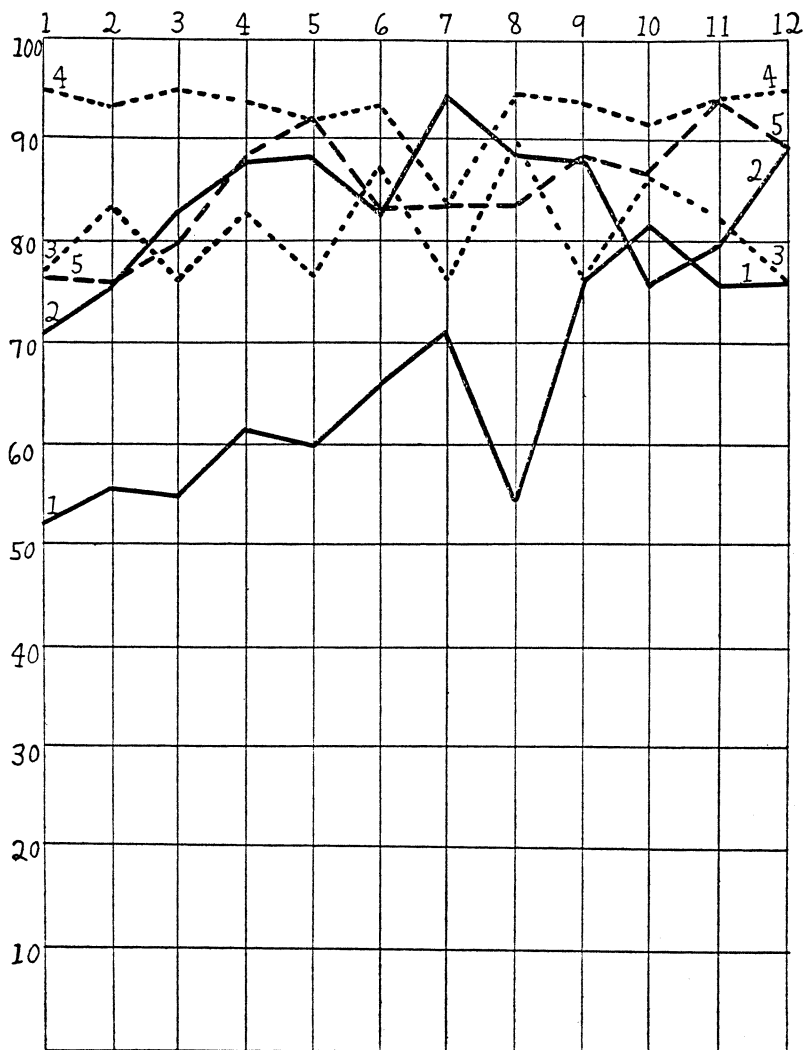


FIG. 2.—Learning curves of five individuals. Figures on ordinate=units on Harvard-Newton scale; figures on abscissa=successive weeks of practice.

mechanical side." He made a decided improvement during the first four weeks and then advanced no more until the seventh week.

when he reached the highest point on the scale. His curve declined from then on with a rise at the end to 89.0.

A fourth type of individual is shown in curve 3. Here you have a mediocre student scoring 76.7 for the initial week and fluctuating slightly above and below this mark for the entire period and ending at 76.1. His net gain for the last over the first month was 0.8 point. At least seventeen individuals, who may be thought to be represented by this case, did not lose in efficiency, but improved less than three points.

Curve 5 represents fairly the largest number of cases, those who improved more than three and less than ten points. It is the students of this group, forty-one in all, who may be thought of as making satisfactory improvement during the three months. The amount of improvement is not large, yet it is sufficient to warrant the time spent on the work.

FORMS OF DISCOURSE AND IMPROVEMENT

There seems little connection between the form of writing being emphasized in the high-school course and the improvement as measured in this experiment. Compositions of the three discourse types were singled out and the scores are arranged in order in Table VI. In Classes I and II the instruction was predominantly in narration; in Class III it covered description. All classes improved in the three types of exercises. Queerly enough, the class being taught description improved less in that form of work than did the two classes that were studying narration.

Clearly some topics produce a better quality of work than do others. A striking case of this is found in the sixth week when the students were asked to write upon "How I Earned Some Money." In the case of every class there is a distinct rise in the curve at this point. In contrast the topics for the fifth and seventh weeks elicited generally poor results. This variability in the appeal made by different topics renders the results of our experiment somewhat equivocal, and what appears to be improvement due to practice may be in part due to other factors. It is hardly probable, however, that the difficult topics should all come first and the better ones last. Certainly the teachers of these classes did not anticipate beforehand a greater motivation from the later topics.

This study raises more questions than it answers. In fact, it cannot be said to have settled any question satisfactorily. At the most it merely calls attention to a method which must be refined and extended if it is to yield adequate results. One by one the complicated conditions influencing improvement through practice must be isolated and studied in detail. The forms of discourse, the nature of the assignment, the amount and kind of corrective work done by the teacher or by the student, the adaptation of work to the present attainment of the student, the influence of corrective

TABLE VI

MEDIAN SCORES OF EACH CLASS IN THE THREE FORMS OF DISCOURSE

Class	Exercise				
	1	2	3	4	5
NARRATION					
1.....	81.3	85.1	85.7	87.0	87.5
2.....	78.1	81.8	88.2	87.5	86.1
3.....	78.6	81.3	85.4	86.9	88.6
DESCRIPTION					
1.....	81.6	83.7	84.1	89.3	.....
2.....	83.9	81.3	84.6	87.7	.....
3.....	80.4	80.7	86.2	83.1	.....
EXPOSITION					
1.....	82.4	81.2	86.3	.....	.....
2.....	77.2	81.1	82.9	.....	.....
3.....	81.7	80.4	85.6	.....	.....

criticism on written work in other subjects than English, the desirable standard of work for high-school students, the definition of aims, the influence of specific methods, the value of outside reading—these are but a few of the problems which should be given detailed study and solution in definite, measured terms. The method of procedure is to define these problems and the method of study so that one of them may be attacked at a time. If by so doing we can substitute investigation for debate in discussion of the composition problem, it will be a step in the right direction.